〈SMALL-SIGNAL TRANSISTOR〉

2SC5210

FOR SMALL TYPE COLOUR TV CHROMA OUTPUT APPLICATION
SILICON NPN TRIPLE DIFFUSED TYPE

DESCRIPTION

2SC5210 is a silicon NPN triple diffused transistor designed for colour TV chrom output circuit, high voltage switching circuit application.

FEATURE

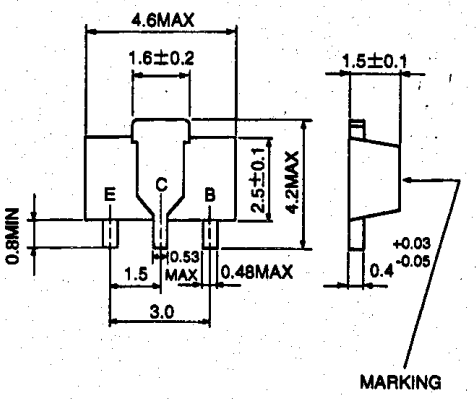
- ●High voltage V_{CEO}=250V
- ●Low C_{ob} C_{ob}=3.5pF typ
- ●High f_T f_T=80MHz typ
- ●Small package for mounting

APPLICATION

Small type colour TV chroma output circuit, high voltage switching circuit.

OUTLINE DRAWING

Unit:mm



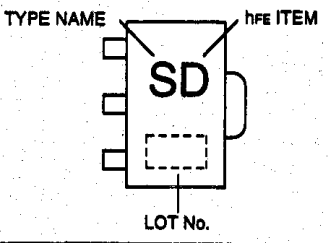
TERMINAL CONNECTOR

E : EMITTER
C : COLLECTOR
B : BASE

EIAJ : SC-62
JEDEC : –

Note)
The dimension without tolerance represent central value.

MARKING



MAXIMUM RATINGS (Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	300	V
V_{EBO}	Emitter to Base voltage	5	V
V_{CEO}	Collector to Emitter voltage	250	V
I_C	Collector current	100	mA
P_C	Collector dissipation(Ta=25℃)	500	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	-55 to +150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	I_C=10μA,I_E=0	300			V
$V_{(BR)EBO}$	E to B break down voltage	I_E=10μA,I_C=0	5			V
$V_{(BR)CEO}$	C to E break down voltage	I_C=5mA,R_{BE}=∞,pulse measurement	250			V
I_{CBO}	Collector cut off current	V_{CB}=150V,I_E=0			1	μA
h_{FE} *	DC forward current gain	V_{CE}=10V,I_C=25mA	55		230	—
$V_{CE(sat)}$	C to E saturation voltage	I_C=25mA,I_B=2.5mA			1.5	V
f_T	Gain band width product	V_{CE}=10V,I_E=-10mA,f=10MHz	60	80		MHz
C_{ob}	Collector output capacitance	V_{CB}=10V,I_E=0,f=1MHz,triode measurement		3.5		pF

* : It shows h_{FE} classification in right table.

Marking	SC	SD	SE
h_{FE}	55 to 110	90 to 180	150 to 230

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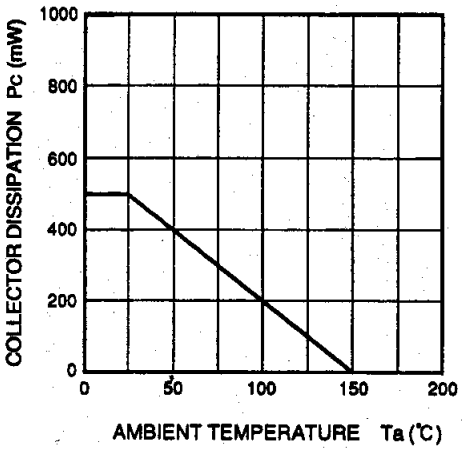
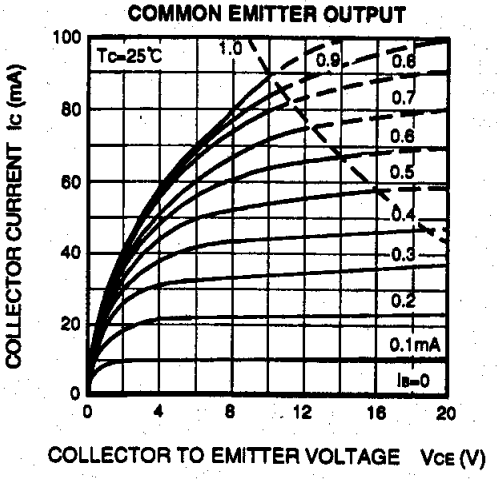
TYPICAL CHARACTERISTICS

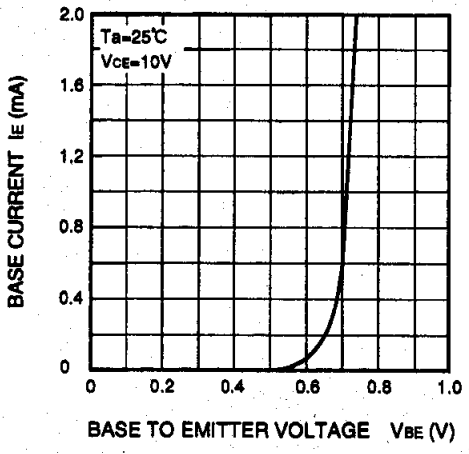
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



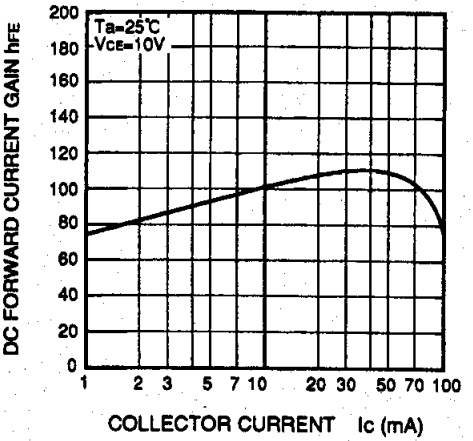
COMMON EMITTER OUTPUT



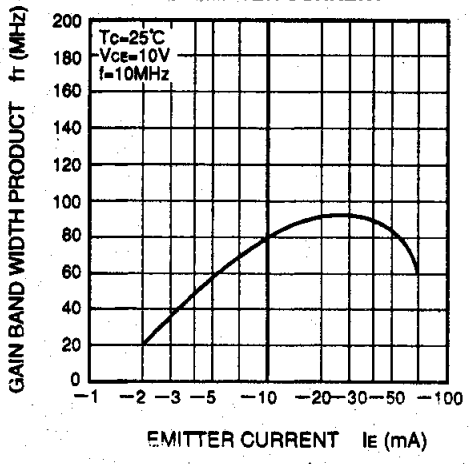
COMMON EMITTER INPUT



DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



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